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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,495	07/11/2003	James Owen	BEAS-01363US0	5399
23910	7590	07/14/2006	EXAMINER	
FLIESLER MEYER, LLP FOUR EMBARCADERO CENTER SUITE 400 SAN FRANCISCO, CA 94111			KIM, PAUL	
			ART UNIT	PAPER NUMBER
			2161	

DATE MAILED: 07/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/618,495	OWEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul Kim	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-14, 17-22, 33-38, 41-46 and 49-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-14, 17-22, 33-38, 41-46, 49-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**SAM RIMELL**  
**PRIMARY EXAMINER**

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/11/06, 2/16/06</u> . | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

1. This Office Action is responsive to the following communication: Amendment filed on 18 April 2006.

#### ***Response to Amendment***

2. Claims 1-6, 9-14, 17-22, 33-38, 41-46, and 49-66 are pending and present for examination.
3. Claims 7-8, 15-16, 23-32, 39-40, and 47-48 have been cancelled.
4. Claims 49-66 are new.

#### ***Drawings***

5. As per the objection to the Drawings, Applicant's amendment has been acknowledged. Consequently, the objection has been withdrawn.

#### ***Specification***

6. As per the objection to the Specification, Applicant's amendment has been acknowledged. Consequently, the objection has been withdrawn.

#### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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8. **Claims 1, 3-4, 9, 11-12, 17, 19-20, 33, 35-36, 41, 43-44, 49, 50-55, 57-58, 61-62, 64-65** are rejected under 35 U.S.C. 102(e) as being anticipated by Hotti et al (U.S. Patent No. 6,970,876, hereinafter referred to as HOTTI), filed on 8 May 2001, and issued on 29 November 2005.

9. **As per independent claims 1, 9, and 53** HOTTI teaches:

A method of operating on a virtual content repository (VCR) that represents a plurality of content repositories {See. HOTTI, col. 1, lines 45-54, wherein this reads over "Database Catalogue" logically partitions a database . . . [wherein] each logical database is a catalogue and contains a complete, independent group of database objects. . . . This makes it possible, for example to create two or more replica databases into one physical database; and col. 1, lines 54-56, wherein this reads over "Database Node' is a database catalogue, which has been defined to act as a master or replica and thus participates in a hierarchy of synchronized databases."} having different types of content, the method comprising:

creating a hierarchy of hierarchy nodes in the VCR {See HOTTI, Figure 9; and col. 9, lines 19-27, wherein this reads over "a hierarchic system where several database systems a, b, c have their respective schema management nodes"} comprising the substeps of:

indicating a location of each hierarchy node in the hierarchy by an identifier {See HOTTI, col. 7, lines 18-41, wherein this reads over "two new, empty database nodes are created to the database server where the application replica database will reside . . . and registered with the configuration management master . . . . As part of the registration, the identification data . . . is sent; and col. 9, lines 38-42, wherein this reads over "the invention can be implemented to work in a telecommunication system, which is compliant with . . . TCP/IP"};

relating each hierarchy node to a type of content {See HOTTI, col. 2, wherein this reads over "[a] schema is a representation of the structure of the database that illustrates what kind of data is stored in the database"}; and

associating each hierarchy node with a first schema {See HOTTI, Figure 2a, Elements 233 and 203; col. 6, lines 20-24, wherein this reads over "replicas of the configuration management master are stored into database server 201, 211, 221 of the database system"; and col. 7, lines 20-26, wherein this reads over, "schema name of the new application database is sent to the configuration management master database node"};

creating a content node for each of the plurality of content repositories {See HOTTI, Figure 9, elements 921 a, b, and c)};

associating each hierarchy node with at least one content node {See HOTTI, col. 2, wherein this reads over "[a] schema is a representation of the structure of the database that illustrates what kind of data is stored in the database"};

associating each content node with a second schema {See HOTTI, Figure 2a, Elements 233 and 203; col. 2, lines 32-34, wherein this reads over "[t]he application replica databases include schemas, which may be a full or partial copy of the schema of the application master database; col. 6, lines 20-24, wherein this reads over "replicas of the configuration management master are stored into database server 201, 211, 221 of the database system"; and col. 7, lines 20-26, wherein this reads over, "schema name of the new application database is sent to the configuration management master database node"};

storing the hierarchy and content nodes in the VCR {See HOTTI, Figure 2b; and col. 3, lines 28-31, wherein this reads over "[t]here is also a configuration management master 233 stored in the

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configuration management node, and replicas 203213, 223 of the configuration management master are stored into database servers 201, 211, 221 of the database system"; and

wherein storing the hierarchy and content nodes in the VCR results in storing each schema in one of the plurality of content repositories {See HOTTI, col. 2, lines 32-34, wherein this reads over "the application replica databases include schemas 113, 123, which may be a full or partial copy of the schema 103 of the application master database"}.

10. **As per dependent claims 3, 11, 19, 35, 43, 57, and 64**, the claims are treated as being optionally recited since the value "can" be a text string, a number, and etc. Therefore, since the requirement for the value being a text string, a number, an image, an audio/visual presentation, and binary data is optional and not necessary to the claimed invention, the claim is rejected.

11. **As per dependent claims 4, 20, 36, 44, 58, and 65**, HOTTI teaches:

The method claim 1 further comprising:

integrating each one of the plurality of content repositories into the VCR by use of one or more of a VCR browser, a content node editor, a schema editor, and a property editor {See HOTTI, col. 7, lines 11-16, wherein this reads over "using the configuring management application"}.

12. **As per independent claims 17, 33, 41, and 62**, HOTTI teaches:

A method (also a computer data signal, a system, and a machine readable medium) of operating on a virtual content repository (VCR) that represents a plurality of content repositories having different types of content, the method comprising:

selecting a node from a hierarchy of both hierarchy nodes and content nodes in the VCR, wherein a location of the node in the hierarchy of nodes is indicated by an identifier, each node is associated with a schema and each content node is associated with one of the plurality of content repositories {See HOTTI, col. 7, lines 18-41, wherein this reads over "two new, empty database nodes are created to the database server where the application replica database will reside . . . and registered with the configuration management master . . . As part of the registration, the identification data . . . is sent; and col. 9, lines 38-42, wherein this reads over "the invention can be implemented to work in a telecommunication system, which is compliant with . . . TCP/IP"}; and

performing an operation on the node, wherein the operation is one of:

deleting the node;  
changing the location of the node in the VCR;  
reading the schema associated with the node; and  
updating the schema associated with the node {See HOTTI, col. 3, lines 21-25, wherein this reads over "These synchronized schema/application configuration management replicas comprise scripts that are used for creating and/or updating the schemas of the database nodes and managing the configurations of applications that use the database node"}.

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13. **As per dependent claim 54, HOTTI teaches:**

The method of claim 53 further comprising:

associating each hierarchy node with a first schema {See HOTTI, Figure 2a, Elements 233 and 203; col. 6, lines 20-24, wherein this reads over "replicas of the configuration management master are stored into database server 201, 211, 221 of the database system"; and col. 7, lines 20-26, wherein this reads over, "schema name of the new application database is sent to the configuration management master database node"};

14. **As per dependent claim 55, HOTTI teaches:**

The method of claim 53 further comprising:

associating each content node with a second schema {See HOTTI, Figure 2a, Elements 233 and 203; col. 2, lines 32-34, wherein this reads over "[t]he application replica databases include schemas, which may be a full or partial copy of the schema of the application master database; col. 6, lines 20-24, wherein this reads over "replicas of the configuration management master are stored into database server 201, 211, 221 of the database system"; and col. 7, lines 20-26, wherein this reads over, "schema name of the new application database is sent to the configuration management master database node"};

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 2-3, 5-6, 10-11, 13-14, 18-19, 21-22, ~~29-30~~, 34-35, 37-38, 42-43, 45-46, 56-59-60 AND 66**  
**57 and 63-64** are rejected under 35 U.S.C. 103(a) as being unpatentable over HOTTI, in view of

Wotring et al (U.S. Patent No. 6,665,677, hereinafter referred to as WOTRING), filed on October 2, 2000, and issued on December 16, 2003.

HOTTI teaches the limitations of claims 1, 3-4, 9, 11-12, 17, 19-20, 33, 35-36, 41, 43-44, 49, 50-55, 57-58, 61-62, 64-65 for the reasons stated above.

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the first and second schemas comprise

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one or more properties, wherein each property is an association between a name and at least one value (claims 2, 10, 18, 34, 42, 56, and 63).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data (claims 3, 11, 19, 35, 43, 57, and 64).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition (claims 5, 13, 21, 29, 37, and 45).

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein a property definition can specify, for a property, property choices (claims 6, 14, 22, 30, 38, and 46).

17. **As per dependent claims 2, 10, 18, 34, 42, 56, and 63**, HOTTI, in combination with WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the first and second schemas comprise one or more properties, wherein each property is an association between a name and at least one value {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the schema comprise properties which are associations between a name and a value. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating the association of names and values.



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18. **As per dependent claims 3, 11, 19, 35, 43, 57, and 64**, HOTTI, in combination with WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the value can be a text string, a number, an image, an audio/visual presentation, or binary data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that the stored value be in the format of a text string, a number, an image, an audio/visual presentation, or binary data.

19. **As per dependent claims 5, 13, 21, 37, 45, and 59**, HOTTI, in combination with WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines the logical categories in which data can be stored"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the schema includes at least one property definition, specifically logical categories into which data may be classified. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.



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One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that certain properties be defined.

20. **As per dependent claims 6, 14, 22, 38, 46, 60 and 66**, HOTTI, in combination with WOTRING, discloses a method (also a computer data signal, a system, and a machine readable medium) where a property definition can specify property choices {See WOTRING, Figure 3; and col. 4, lines 27-30, wherein this reads over "[t]he schema defines . . . the attributes that belong to the individual logical categories"}.

The combination of inventions disclosed in HOTTI and WOTRING would disclose an invention which would comprise of a method (also a computer data signal, a system, and a machine readable medium) wherein the property definition can specify certain property choices, or attributes belonging to individual logical categories. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING.

One of ordinary skill in the art would have been motivated to do this modification since a schema is a description for how data is stored in a database, thus, necessitating that certain property definitions be specified in further detail by property choices.

21. **Claims 12, 49, 50-52, and 61** are rejected under 35 U.S.C. 103(a) as being unpatentable over HOTTI, in view of Wotring et al (U.S. Patent No. 6,853,997, hereinafter referred to as WOTRING '997), filed on 28 June 2001, and issued on 8 February 2005

HOTTI teaches the limitations of claims 1, 3-4, 9, 11-12, 17, 19-20, 33, 35-36, 41, 43-44, 49, 50-55, 57-58, 61-62, 64-65 for the reasons stated above.

HOTTI differs from the claimed invention in that HOTTI fails to teach a method (also a computer data signal, a system, and a machine readable medium) wherein the identifier is a path (claims 12, 49-52, and 61).

22. **As per dependent claims 12, 49-52, and 61**, HOTTI, in combination with WOTRING '997, discloses a method wherein the identifier is a path {See WOTRING '997, Figures 1 and 2}.

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The combination of inventions disclosed in HOTTI and WOTRING '997 would disclose an invention which would comprise of a method wherein the identifier is a path indicating the location of the hierarchy node in the hierarchy (e.g. "Entity Path = \"Person\Physical Descripton\""). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by HOTTI by combining it with the invention disclosed by WOTRING '997.

One of ordinary skill in the art would have been motivated to do this modification so that the application may determine the location of each hierarchy node in the hierarchy.

### ***Response to Arguments***

23. **As per claim 1**, Applicant's arguments filed 18 April 2006 have been fully considered but they are not persuasive.

a. Applicant's Arguments:

- i. Hoti discloses one repository or database, such that one set of data is replicated from the database to other empty database nodes.
- ii. Hoti fails to disclose a hierarchy of nodes because it discloses just one type of content.
- iii. Hoti fails to disclose content nodes associated with a hierarchy node based on content type.
- iv. Hoti fails to disclose metadata for content of different types.

b. Response to Arguments:

- i. Regarding Applicant's argument that Hoti fails to disclose a plurality of content repositories having different types of content, it is noted that Hoti indeed does teach, disclose, and suggest Applicant's claimed invention in Figure 9 and through the disclosure of "a hierarchic system where several database systems a, b, c, have their respective schema nodes." While Hoti discloses the replication of the configuration management master, the replication of such is not one of the content but of the schema configuration. That is, the configuration management

apparatus allows for the keep of multiple, possibly different database schemas and application in synchronization (i.e. "[t]he configuration management replicas include scripts for creating and/or updating the schemas and/or application configuration of the database"). Therefore, for the reasons stated above, Hotti does not disclose the replication of database such that the content repositories fail to have different types of content.

ii. Regarding Applicant's argument that Hotti fails to disclose a hierarchy of nodes because it discloses just one type of content, it is noted that Hotti indeed does teach, disclose, and suggest Applicant's claimed invention in Figure 9 and through the disclosure of "a hierarchic system where several database systems a, b, c, have their respective schema nodes." Hotti discloses a hierarchy of hierarchy nodes in the VCR through Figure 2A-B and 9 wherein schema and configuration data is passed along to the configuration management replica, master, or node. Subsequently, such schema and configuration data are passed along down the hierarchy of nodes.

iii. Regarding Applicant's argument that Hotti fails to teach that content nodes are associated with a hierarchy node based on content type, it is noted that Hotti discloses that "[a] schema is a representation of the structure of the database that illustrates what kind of data is stored in the database" (See Hotti, col. 2). That is, the schema related to the database would allow for the associated of content nodes with a hierarchy node based on content type.

iv. Regarding Applicant's argument that Hotti fails to disclose metadata for content of different types, its is noted that Hotti discloses that "[a] schema is a representation of the structure of the database that illustrates what kind of data is stored in the database" (See Hotti, col. 2). Therefore, Hotti disclose the functional equivalent of "metadata," since each hierarchy node may be associated with a schema.

24. **As per claim 4**, Applicant's arguments filed 18 April 2006 have been fully considered but they are not persuasive.

a. Applicant's Arguments:

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Hotti fails to teach the use one or more of a VCR browse, a content node editor, a schema editor and a property editor.

b. Response to Arguments:

Regarding Applicant's argument that Hotti fails to teach the use one or more of a VCR browse, a content node editor, a schema editor and a property editor, it is noted that Hotti discloses the use of "configuration management application" which allows for "managing the schemas and application configuration of the database system." Accordingly, this would satisfy the functional equivalent of a schema editor, as claimed in claim 4.

25. **As per claim 12**, Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Kim  
Patent Examiner, Art Unit 2161  
Technology Center 2100



**SAM RIMELL**  
**PRIMARY EXAMINER**